



The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
State Laboratory Institute  
305 South Street, Jamaica Plain, MA 02130

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TIMOTHY P. MURRAY  
LIEUTENANT GOVERNOR

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COMMISSIONER

Clinical Advisory

**TO:** Massachusetts Health Care Providers  
**FROM:** Alfred DeMaria, Jr., MD  
Chief Medical Officer, State Epidemiologist  
Massachusetts Department of Public Health  
**DATE:** April 2007  
**RE:** Hepatitis C Among Youth Ages 15-25 years

Massachusetts hepatitis C surveillance data has shown a trend of increasing diagnoses of hepatitis C virus (HCV) infection in adolescents and young adults between the ages of 15 and 25 years. From 2002 to 2005, reported positive HCV antibody tests in this age group have risen from 15 to 32 per 100,000 population (confirmed tests). While this represents positive tests in those who had reason to be tested, and not routine screening or new infections *per se*, given the ages of these individuals, it is likely that their infections were recent.

The Massachusetts Department of Public Health (MDPH) has initiated enhanced surveillance of hepatitis C in adolescents and young adults to understand the nature of this trend better and to ensure appropriate services are provided. The MDPH relies on clinicians to provide prompt, complete and accurate data on hepatitis C cases. This information is important for determining what specific risks are leading to the increase in cases currently being seen in individuals 15 to 25 years of age and will allow MDPH to implement appropriate prevention programs.

As part of this enhanced surveillance, medical providers are being asked to conduct thorough risk assessments for all patients, provide detailed information on risk history for patients in this age group who test positive for HCV infection, and educate patients who might be at risk about harm reduction and disease prevention. Since screening of the blood supply began in the early 1990s, HCV is primarily transmitted through blood to blood contact related to needle use and other substance abuse related behaviors. Individuals with HCV infection should be referred to appropriate services, including substance abuse services as needed, medical management and immunizations against hepatitis A and B if not immune.

Little is known about HCV infection in adolescents and young adults in the United States. Studies in Texas and California of adolescents in juvenile detention centers found that approximately 2% demonstrated serologic evidence of HCV infection, and that adolescents with a history of injection drug use were more likely to be HCV seropositive. Examination of data from youth aged 24 years or younger participating in the Vancouver Injection Drug Users Study demonstrated an HCV infection prevalence of 52% in addicted youth at 36 months after enrollment in the study.

Conducting thorough HCV risk assessments for all patients, including those in this age category, is recommended. HCV testing should be done on anyone who has:

- Ever injected illegal drugs (including steroids)
- Received a blood transfusion or solid organ transplant before July 1992
- Received clotting factors made before 1987
- Been on long-term dialysis
- Been notified that they received blood from a donor who later tested positive for hepatitis C
- Evidence of liver disease.

When testing a patient who you believe may be at risk for hepatitis C, a thorough history, including questions about incarceration, drug use, and sexual behavior should be collected.

Positive laboratory results for HCV infection should be faxed to the Office of Integrated Surveillance and Information Services at 617-983-6813. For patients between the ages of 15 and 25 years, the physician who ordered the test will be sent a packet containing a cover letter, a copy of the laboratory findings and a blank hepatitis C case report form. The cover letter will note that the case is between 15 and 25 years old and will contain available contact information, as well as instructions on where to send the form when completed. MDPH Disease Intervention Specialists are available to assist in providing follow-up for those cases where data are limited.

Regardless of test results for HCV infection, all at-risk patients should be offered vaccination against hepatitis A and B (unless known to be immune) and education on prevention of transmission of HCV. Patients who inject drugs can protect themselves and others by not sharing needles and other equipment that may come into contact with infected blood, and by washing their hands before and after injecting. In addition patients should be educated on not sharing cocaine straws and crack pipes. Although the risk of sexual transmission of HCV is low, condom use should be discussed to reduce the risk even further and to prevent transmission of other sexually transmitted diseases.

Resources for both providers and patients are available on the MDPH website at [www.mass.gov/hepc](http://www.mass.gov/hepc) and through the toll-free hepatitis C hotline (1-888-443-HEPC). MDPH health educators are available to provide education on hepatitis C. MDPH epidemiologists can answer questions about hepatitis C and other infectious diseases at 617-983-6800.